Bangalore Electricity Supply Company Limited

(CIN-U4010KA2002SGC030438)

Ref. No. : BESCOM/D(T)/GM(M&C)/2024-25/1058
Encl :

Corporate Office,
BESCOM, K.R. Circle,
Bangalore-560 001.
Date: 23/8/2024

Clarification No.-1

Sub: Procurement & Commissioning of CT & PT Test bench Equipment as per BESCOM specifications for the use in MT Divisions BMASZ, BRAZ & CTAZ of BESCOM.

Ref: 1. Paper Notification dated 11.06.2024.
2. T.O. Bid Enquiry No. BESCOM/GM(M&C)/CT & PT Test Bench/142/2023-24 (KPPP Enquiry No.BESCOM/2024-25/IND-0076 Dated: 03.07.2024.
3. Pre-bid meeting held on 10.07.2024.

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The following Clarifications pertaining to subject bid enquiry is herewith issued consequent to request from the prospective bidders and deliberations during pre-bid meeting.

Sl. No	As existing Clause No.	Clarifications/amendments sought by the firm	BESCOM Clarifications
1	**ITB Clause No 20.7:** The bidder should provide a standby 1 No of CT & PT test bench equipment till the faulty CT or PT test bench get repaired and returned. After the replacement / repairs / rectification, the accuracy shall not be affected. Test report and calibration certificate shall invariably be submitted after rectification / repairs. If defective CT & PT test bench is not replaced / repaired / rectified within the specified period as above, BESCOM reserves the right to initiate action against the vendor/successful bidder.	CT and VT Systems are quoted with 5 years warranty at site. During the warranty period any breakdown calls / email will be attended within 2 days of receipt of intimation (except long weekends/ holidays). The repair/ rectification will be carried out free of charge at no cost implication to BESCOM. Individual components / modules will be rectified and made operational. We are unable to provide a complete CT/PT Rack System as stand by as it is not needed.	The bidder should have spare individual component/ modules for early rectification /repairs in the CT PT test bench System.
2	**ITB Clause No 22.8:** Cyber Security Conformance - Protocols, Standards & Testing Laboratories	Cyber Security conformance / protocol etc: The quoted VT Test System and CT Test System are offline testing Systems. The test CTs/ PTs Ratio Error/ Phase Error Accuracy measurements are carried out without any Internet/ Wifi connections. These are not needed	Tender condition prevails

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		for our System and so they may be deleted. Remote Terminal Units (RTUs) & PLCs – Not Applicable for this tender. Intelligent Electronic Equipment, Relay/ Bay control units etc. – Not Applicable for this tender. Smart Meters – Not Applicable for this tender. IT related products – Not Applicable for this tender.	
	CT Test system to Test CTs upto 2000 A		
3	Model AITTS Plus, Automatic Instrument Current Transformer Test Set	Specific make & Model: We understand that, asked requirement is by open tender, whereas specific make and model has been mentioned. Hence the specifications shall be amended as neutral manner as other Govt. utilities are floating. We are enclosing the specification floated by utilities for your ready reference	Please Refer Revised Technical specifications
4	USB computer interfaces, USB Printer Port, burden measurement facility & Pen Drive data storage. Results displayed on multi –colour TFT display inclusive of Transport case along with Windows Interface Software and option to connect external LCD display.(HSN Code:9031.8000), Input Voltage : 90-240V, 50Hz	Specification are related to particular make & essential metrological parameters like Accuracy of current measuring, accuracy of ratio error and phase error measurement etc. not define in detail. We are enclosing the specifications floated by other Govt. Utilities in which details specification of measuring unit has been asked. Please note that the requirement is for capital equipment, hence detail specification in neutral manner shall be asked.	Please Refer Revised Technical specifications
5	Standard Current Transformer for 2000/5A to 2.5/1A (Accuracy 0.005%) with number of taps along with 4KA, 16KVA in built current source.	The under test CTs are maximum of class 0.2s hence to maintain TUR (test uncertainty Ratio) of 10, the overall Accuracy of system 0.02% shall be asked and SCT accuracy shall be asked 0.01 in this regard. 0.005% accuracy for Std. Current Transformer seems typographical mismatch, since to test 0.2s class CTs such high accuracy is not required. However better overall accuracy of CT test system shall be asked to achieve best TUR.	Please Refer Revised Technical specifications
6	Above system pre –wired into two vertical racks with high current Contactors CT selection panel, controls, indicators etc	Specification are related to particular make. It depend on design of manufacturer, hence it shall be amended. However it shall be asked in view of Safety point of view of the operator	Please Refer Revised Technical specifications
7	Model AITTS Plus, Automatic Instrument	Specific make & Model:	Please Refer Revised Technical specifications

Sl. No	As existing Clause No.	Clarifications/amendments sought by the firm	BESCOM Clarifications
	Voltage Transformer Test Set	We understand that, asked requirement is by open tender, whereas specific make and model has been mentioned. Hence it shall be clarify.	
8	USB computer interfaces, USB Printer Port, burden measurement facility & Pen Drive data storage. Results displayed on multi-colour TFT display inclusive of Transport case along with Windows Interface Software and option to connect external LCD display.(HSN Code:9031.8000), Input Voltage : 90-240V,50Hz	Specification are related to particular make & essential metrological parameters like Accuracy, stability etc. not defined in detail. We are enclosing the specifications floated by other Govt. Utilities in which details specification of measuring unit has been asked. Please note that the requirement is for capital equipment, hence detail specification in neutral manner shall be asked.	Please Refer Revised Technical specifications
9	External 7.5KVA, 50kV 3phase High voltage oil cooled Transformer with control desk.	Specifications are related to particular make. It may be checked that to test 33KV PTs maximum 39.6KV is required so merely 40KV resin cast standard PT are being in practice usually. It depends on design of manufacturer, hence it shall not be restricted to bidder. The Three Phase Voltage source of 7.5KVA/50KV must also be suitable for testing 33kV VTs upto **190%.**	Please Refer Revised Technical specifications
10	Above system pre –wired into two vertical racks with high current contactors VT selection panel, controls, Indicators etc.	Specifications are related to particular make. The design of panels are as per the component built from manufacturer. Hence mentioning specifically design will restrict the bidders. It depends on design of manufacturer, hence it shall be amended. However it shall be asked in view of Safety point of view of the operator.	Please Refer Revised Technical specifications
11	Shall be Added for VT test system	- Rail Arrangement System - Automatic Earthing during Testing - Light Curtains Essential devices shall be added, in view of safety of the operator during testing.	Please Refer Revised Technical specifications
12		• As per the latest amendment of IEC 61869-3/IS16227 (Part 3) – the VT testing for Protection class voltage transformer is to be carried out **upto 190%.** Copy attached for reference. • In view of the above the multi ratio Std PT – Acc 0.05 class indicated may also be rated **upto 190%.**	Please Refer Revised Technical specifications

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		• The Potential Burdens of 110V (3 Nos.) & 63.5V (1 No.) are also to be rated for **190%.** • Multi ratio Std PT must also include the VT ratio of 440V/110V & 440/^3/ 110/^3. • This ratio is commonly used in BESCOM Distribution Network all over Karnataka. • The VT System is only for testing Voltage Transformers (VTs). So no CT testing ratio panel etc is applicable.	

(Yogesh B.K)
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BESCOM